

**From:** [Weaver, Kimberly](#)  
**To:** [1490Comments](#)  
**Subject:** Comments on proposed Science Standards  
**Date:** Wednesday, November 18, 2015 10:15:38 AM

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My comments on the proposed K-12 Science standards are as follows:

**I applaud the decision to base the standards on the Next Generation Science Standards.** Particularly at the 6-12 grade bands, it is good to see close agreement between NGSS and the proposed Missouri Standards. However, in the K-5 bands, there is not as much agreement. **I would like to see Missouri adopt the full, complete, and exact set of NGSS standards** as is, rather than believing that we can “do better” than the hundreds of experts who put together the NGSS. Adopting the NGSS standards with no changes will also create a clearer environment for teachers and curriculum developers. Experts in other states are already creating materials aligned with NGSS.

If the decision is made to NOT use the NGSS exactly, then I would urge you to consider using a different numbering/naming system than the NGSS. If you keep the numbering system the same, it will be extremely confusing to educators. For example, the NGSS Standard MS-LS1-5 is called MS-LS1-6 in the proposed standards. Missouri should adopt a new naming/numbering system so that it is readily apparent to all that they are looking at an NGSS standard or a Missouri standard. **Of course, a better solution would be to adopt the NGSS as is.**

**However, one way that the proposed Missouri standards deviate significantly from the NGSS standards is the removal of the Engineering standards for K-12.** These standards in the NGSS are critical to preparing students to be creative, problem-solving employees of tomorrow. The engineering standards (provided in the NGSS in bands K-2, 3-5, 6-8, and 9-12) can be incorporated with science content and bring more relevance and meaning to the science classroom. These standards are also at the heart of the “3-dimensional learning” that is central to the NGSS. The Science and Engineering Practices and Crosscutting Concepts that are included in the 6-12 proposed standards (modeled after the NGSS) are directly applicable to the engineering standards, but don’t make much sense without the inclusion of engineering standards. **I strongly urge you to reconsider restoring engineering standards standards.**

Overall, my comments can be summarized as follows: **I recommend that Missouri adopt the full and complete K-12 Next Generation Science Standards, which include standards for engineering.**

Respectfully,

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